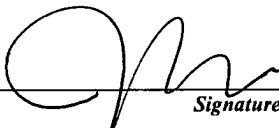
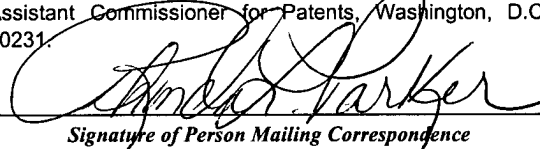


2834 2100

<b>AMENDMENT TRANSMITTAL LETTER (Large Entity)</b>				<b>Docket No.</b> 04452/015001	
<b>Applicant(s):</b> Yoshinori ITO					
<b>Serial No.</b> 09/912,938	<b>Filing Date</b> July 25, 2001	<b>Examiner</b>		<b>Group Art Unit</b>	
<b>Invention:</b> ABSOLUTE POSITION DETECTING DEVICE FOR A LINEAR ACTUATOR					
<u>TO THE ASSISTANT COMMISSIONER FOR PATENTS:</u>				<b>RECEIVED</b> JAN 30 2002 Technology Center 2600	
Transmitted herewith is an amendment in the above-identified application.					
The fee has been calculated and is transmitted as shown below.					
<b>CLAIMS AS AMENDED</b>					
	<b>CLAIMS REMAINING AFTER AMENDMENT</b>	<b>HIGHEST # PREV. PAID FOR</b>	<b>NUMBER EXTRA CLAIMS PRESENT</b>	<b>RATE</b>	<b>ADDITIONAL FEE</b>
TOTAL CLAIMS	2 -	20 =	0 x	\$18.00	\$0.00
INDEP. CLAIMS	1 -	3 =	0 x	\$84.00	\$0.00
Multiple Dependent Claims (check if applicable) <input type="checkbox"/>					\$0.00
<b>TOTAL ADDITIONAL FEE FOR THIS AMENDMENT</b>					\$0.00
<div><input checked="" type="checkbox"/> No additional fee is required for amendment.</div> <div><input type="checkbox"/> Please charge Deposit Account No. _____ in the amount of _____ A duplicate copy of this sheet is enclosed.</div> <div><input type="checkbox"/> A check in the amount of _____ to cover the filing fee is enclosed.</div> <div><input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 50-0591 A duplicate copy of this sheet is enclosed.</div> <div><input checked="" type="checkbox"/> Any additional filing fees required under 37 C.F.R. 1.16.</div> <div><input type="checkbox"/> Any patent application processing fees under 37 CFR 1.17.</div>					
<div> Signature</div> <div><b>Jonathan P. Osha, Reg. No. 33,986</b> <b>Rosenthal &amp; Osha L.L.P.</b> <b>1221 McKinney, Suite 2800</b> <b>Houston, Texas 77010</b></div> <div><b>Telephone: (713) 228-8600</b> <b>Facsimile: (713) 228-8778</b></div>			<div><b>Dated:</b> 12/6/01</div> <div><div><div>I certify that this document and fee is being deposited on 12-12-01 with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.</div><div> Signature of Person Mailing Correspondence</div><div><b>Rhonda L. Parker</b> Typed or Printed Name of Person Mailing Correspondence</div></div></div>		
<div>CC:</div> <div style="text-align:right">P11LARGE/REV06</div>					



PRELIMINARY AMENDMENT  
ATTORNEY DOCKET NO.: 04452/015001

#5  
Pre Amended  
2:16:02  
RM

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

JAN 31 2002

**APPLICANT:** Yoshinori ITO

**SERIAL NO:** 09/912,938

**FILED:** July 25, 2001

**TITLE:** Absolute Position Detecting Device for a Linear Actuator

TC 2600 MAIL ROOM  
**ART UNIT:**  
**EXAMINER:**

U.S. Patent and Trademark Office  
P. O. Box 2327  
Arlington, VA 22202

### PRELIMINARY AMENDMENT

Dear Sir:

Before examining the referenced application on the merits, please amend the application as outlined below:

### IN THE SPECIFICATION

Please amend the Specification as follows. A marked-up copy of the amended portions of the Specification are provided in Appendix B:

Please replace paragraph 5 located at page 4, line 39 through page 5, line 9 with the following:

Q1 (Amended) With each rotation of the motor 2, the actuator output shaft 3 is moved linearly in the axial direction by an amount that is in accordance with the lead pitch of the ball-screw 41. Here, the combination of signal A and signal B will be examined. If  $L_p$  is the amount by which the output shaft 3 is moved per rotation of the motor and  $S_p$  is the detection pitch (one linear-stroke pitch) as detected by the linear absolute sensor, and  $L_p \neq S_p$ , then, if signals A and B are combined, even if the output shaft 3 moves within the space of the movement interval until  $aL_p = bS_p$  (where a and b are arbitrary coefficients), at no point of the movement is the combination of the signals A and B the same. Therefore, provided that the values of coefficients a and b are sufficiently large, it is possible to realize a linear absolute sensor that, based on the combination